

**Abstract of the Disclosure**

A jitter buffer system for reducing jitter in a packet audio reception device comprises an output time stamp index, a delay calculation module, and a histogram module. The output time stamp index determines an initial output time stamp value upon receipt of a jitter buffer latency value and increments the output time stamp upon release of each of the frames by a jitter buffer. The delay calculation module calculates a delay value for each of the sequence of received frames. The delay value is equal to the time difference between the output time stamp value and a transmission time stamp assigned to the frame by the transmitting system. The histogram module is coupled to each of the output time stamp index and the delay calculation module, the histogram module periodically calculates a target delay value which, based on a buffered history of values representing the delay value of each of a fixed quantity of the most recently received frames from the sequence of receive frames, would have resulted in a predetermined portion of the fixed quantity of frames being dropped, and adjusting the jitter buffer latency value to a value equal to the target value.